Application No. 10/796,047

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Cancelled)

11. (Currently Amended) A method of making an optical fiber having a plurality of voids extending along the fiber axis, comprising the steps of:

preparing a preform having a plurality of voids whose cross-sectional areas are uniform along the preform axis; and

drawing the optical fiber from the preform with a fiber drawing furnace, wherein the drawing step includes obtaining an area fraction of the plurality of voids in the drawn optical fiber, and performing feedback control of pressure in the plurality of voids, a furnace temperature and time for fiber to pass the fiber drawing furnace, based on the obtained area fraction.

12. (Currently Amended) A method of making an optical fiber according to claim 11, the obtaining step comprises the sub steps of:

measuring a speed at which the preform is supplied, a speed at which the optical fiber is drawn, and a diameter of the optical fiber during drawing; and

calculating [[the]] an area fraction of the plurality of voids in said drawn optical fiber from the measured values measured in the measuring step, [[the]] a preform diameter, and [[the]] an area fraction of the plurality of voids in the preform, where the preform diameter and the area fraction of the plurality of the voids in the preform are measured before the optical fiber drawing.

13. (Currently Amended) A method of making an optical fiber according to claim 11, wherein the obtaining step comprises the sub steps of:

measuring a speed at which the optical fiber is drawn, a diameter of the optical fiber, a tension during <u>drawing drawings</u>, and a temperature in a drawing furnace during optical fiber drawing; and

calculating an area fraction of the plurality of voids in said drawn optical fiber from the measured values measured by the measuring step.

14. (Previously Presented) A method of making an optical fiber according to claim 11, wherein the preparation step comprises the steps of:

preparing a base material having an axis in a single piece;

boring three or more voids of the plurality of voids in the base material along the base material axis; and

cleaning surfaces of the base material at said plurality of voids.

15. (Previously Presented) A method of making an optical fiber according to claim 14, wherein said boring step comprises the sub steps of:

inserting protruding portions of a boring appliance into said base material at a temperature above a glass softening point; and

pulling out the protruding portions from the base material immediately before or after lowering the temperature of said preform.

16. (Currently Amended) A method of making an optical fiber which contains a plurality of regions made of a sub medium whose refractive index differs from that of a main medium constituting the optical fiber, comprising the steps of:

preparing a preform having a plurality of regions made of a sub medium having crosssectional areas that are constant along the preform axis; and

drawing the optical fiber from said preform,

wherein the drawing step includes adjusting a holding heating condition in a manner in which at least a temperature of a drawing furnace for heating said preform or a time length for the optical fiber to pass the drawing furnace is varied.

17. (Previously Presented) A method of making an optical fiber according to claim 16, wherein said drawing step further includes obtaining an area fraction of the plurality of regions made of a sub medium, and

performing feedback control of the heating condition based on the obtained area fraction.

18. (Previously Presented) A method of making an optical fiber according to claim 17, wherein the obtaining step comprises the sub steps of:

measuring a speed at which the preform is supplied, a speed at which the optical fiber is drawn, and a diameter of the optical fiber during drawing, and

calculating the area fraction of the plurality of regions made of a sub medium in said drawn optical fiber from the measured values, the preform diameter, and the area fraction of the plurality of regions made of a sub medium in the preform,

wherein the preform diameter and the area fraction of the plurality of regions made of a sub medium in the preform are measured before the drawing step.

19. (Previously Presented) A method of making an optical fiber according to claim 17, wherein the step of obtaining comprises the sub steps of:

measuring a speed at which the optical fiber is drawn, a diameter of the optical fiber, a tension during drawing, and a temperature in the drawing furnace during drawing, and

calculating an area fraction of the plurality of regions made of a sub medium in said drawn optical fiber from the measured values.

20. (Previously Presented) A method of making an optical fiber according to claim 16, further comprising the preprocessing steps of:

making a preform in a single piece;

boring three or more voids in said preform along the preform axis; and cleaning surfaces of the preform at said voids.

21. (Previously Presented) A method of making an optical fiber according to claim 20, wherein said boring step comprises the sub steps of:

inserting protruding portions of a boring appliance into said preform at a temperature above a glass softening point; and

pulling out the protruding portions from said preform immediately before or after lowering the temperature of said preform.

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- 22. (Cancelled)
- 23. (Cancelled)
- 24. (Previously Presented-Withdrawn) A method of making an optical fiber having a plurality of voids, comprising the steps of:

closing the voids by heating and fusing an optical fiber selectively at a plurality of portions spaced apart along the fiber axis,

wherein the optical fiber is made by a method according to claim 11.

25. (Cancelled)